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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/758,816

01/16/2004

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EXAMINER

LEE, CYNTHIA K

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

03/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/758,816	<b>Applicant(s)</b> MURPHY ET AL.	
	<b>Examiner</b> CYNTHIA LEE	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/7/2009 has been entered.

***Response to Amendment***

This Office Action is responsive to the amendment filed on 1/7/2009. Claims 1-9 are pending. Applicant's arguments have been fully considered and are found persuasive. Claims 1-9 are non-finally rejected for reasons stated herein below.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsunoda (US 7258944).

Refer to fig. 10. Regarding claim 1, Tsunoda discloses a fuel cell comprising:

a first planar manifold defined between a first gas-impermeable element and an active element (exhaust passage 106);

a plurality of spacers (bosses 80 collectively read on Applicant's spacers) disposed within said first planar manifold, each of said plurality of said spacers and said first gas-impermeable element having an orifice formed therethrough (spaces between the bosses read on Applicant's orifice); for example, in fig. 7, the bosses 80 on each portion of the plate 60 form two concentric circular spacers: one spacer formed by 6-bosses labeled 80, and a larger concentric spacer formed by 12-bosses labeled 80.

a second planar manifold defined between said first gas-impermeable element and a second gas-impermeable element in a subjacent relationship to said first planar manifold (oxygen-containing channel 82);

wherein a flow path is established from said second planar manifold through said orifice over said active element to said first planar manifold.

Regarding claim 2, Tsunoda discloses an electrically conductive path extending through the fuel cell to provide continuity from said active element, through said plurality of spacers and said first gas-impermeable element to said second gas-impermeable element (7:10-13).

Regarding claim 3, Tsunoda discloses wherein said plurality of spacers are electrically conductive so as to establish said electrically conductive path (7:10-13).

Regarding claim 5, Tsunoda discloses wherein said first gas-impermeable element is disposed in a substantially parallel spaced relation to said second gas-

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impermeable element such that said first planar manifold is substantially parallel with said second planar manifold.

Regarding claim 6, Tsunoda discloses a second plurality of spacer disposed within said second planar manifold (the outer concentric circle formed of bosses 80 on plate 60, see fig. 7).

Regarding claim 7, Tsunoda discloses wherein said plurality of spacers comprise a nested array of spacers disposed on said first gas-impermeable element (ridge 66 on fig. 10).

Regarding claim 8, Tsunoda discloses a frame (bolts 42) interposed between said first gas-impermeable element and said second gas-impermeable element.

Regarding claim 9, Tsunoda discloses wherein said plurality of spacers are equidistantly spaced on said first gas-impermeable element within said first planar manifold (ridges 66 on fig. 10).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda (US 7258944) as applied to claim 1, in view of Bronoel (US 2001/0006745).

Tsunoda does not disclose wherein said electrically conductive path further

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comprises an electrically conductive filler disposed in a via formed through said first gas-impermeable element. Bronoel teaches a separator plate wherein the electronic conduction is provided by uniformly distributed metal cylinders penetrating into the electrodes. See Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Bronoel's metal cylinders to the separator plate of Tsunoda for the benefit enhanced electrical conduction to the separator plate of Tsunoda.

### ***Response to Arguments***

Applicant's arguments filed 1/7/2009 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cynthia Lee/  
Examiner, Art Unit 1795

/PATRICK RYAN/  
Supervisory Patent Examiner, Art  
Unit 1795